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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,895

11/21/2006

Hein Wille

2001-1464

5800

466 7590 06/09/2010

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EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

NOTIFICATION DATE

DELIVERY MODE

06/09/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,895	<b>Applicant(s)</b> WILLE, HEIN	
	<b>Examiner</b> THOMAS A. BEACH	<b>Art Unit</b> 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12,15,16,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10,12,15,16,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **EXAMINER'S AMENDMENT**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "support cable" (claims 10 & 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. It is not clear or supported in the specification that these support cables are also the anchor lines.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 10 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claims 10 and 16, it is vague and indefinite as to how either the buoyancy element or the support cable can be claimed as “extending at an angle to the vertical” since the specification lacks enablement for this claimed arrangement.

5. Claims 1, 3-10, 12, 15, 16, 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Regarding claims 1 and 8, the phrases “of a similar type” and “in a similar manner” render the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by “similar”), thereby rendering the scope of the claim(s) unascertainable. *In re Slayter (CCPA) 125 UPQ 345*. It is suggested that all

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the required claims elements and connections thereto relating to the "similar" type and manner be positively claimed, as they have been above in the claim, thus replacing this kind of indefinite language.

7. Regarding claims 10 and 16, the phrase "and/or" renders the claim(s) indefinite because it is unclear whether both or one of the claimed elements is being claimed, thereby rendering the scope of the claim(s) unascertainable

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Seat 2006/004593. Seat shows a hydrocarbon exploration system, comprising a first vessel (50) having a turret (80) around which the vessel can weathervane, the turret being moored to the sea bed, and a second vessel (20A-20D) connected with at least one riser (not shown but inherent to independent production platforms) to a subsea well, the first vessel being connected to the second vessel via a fluid transfer duct (70, 90) comprising a first end section attached to the turret (80) of the first vessel (50), a substantially horizontal mid section (fig 1), and a second end section attached at or near

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the second vessel (20A-20D), wherein the second vessel has no large hydrocarbon storage facilities and a hull weight of between 2,000 and 15,000 tons and comprises an upper structure and a submerged base to which second vessel the riser is connected, the base attached to the sea bed via taut tendons, the weight exerted by the fluid transfer duct (70, 90) on the second vessel being below 1,000 ton, a power generator [0037] being situated on the first vessel (50), wherein power is being transferred from the power generator [0038] via an electrical swivel on the first vessel, to a power supply cable, the power supply cable (not shown) extending along the fluid transfer duct (70, 90) from the first vessel (50) to the second vessel (20A-D), and being supported at least partly by the fluid transfer duct (20,21), and wherein at least one further vessel (20A-D), of similar type as the second vessel, is attached to the first vessel (50) via a respective fluid transfer duct (70, 90) in a similar manner as the second vessel (20A-20D).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack 5,542,783 in view of Salusbury-Hughes 4,753,185. As concerns claims 1, 8 and 9, Pollack shows, in figures 6 & 10-11, a hydrocarbon exploration system, having

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a first vessel (160) having a turret (see fig 10) around which the vessel can weathervane, the turret being moored to the sea bed, and a second vessel (16) connected with at least one riser (26) to a subsea well, the first vessel being connected to the second vessel via a fluid transfer duct (48/44/156) comprising a first end section attached to the turret (fig 10) of the first vessel (160), a substantially horizontal mid section (fig 10), and a second end section attached at or near the second vessel (16), wherein the second vessel (16) has no large hydrocarbon storage facilities and a hull weight of between 2,000 and 15,000 tons and comprises an upper structure (fig 6) and a submerged base (fig 6) to which second vessel (16) the riser (26) is connected, the base (24) being attached to the sea bed via taut tendons (20), the weight exerted by the fluid transfer duct (48/44/156) on the second vessel (16) being below 1,000 ton, and wherein at least one further vessel (16) same as the second vessel (16), is attached to the first vessel (160) via a respective fluid transfer duct (156) in a similar manner as the second vessel (16), but does not show a power generator being situated on the first vessel (160) and power supply cables.

However, Salusbury-Hughes shows a similar hydrocarbon exploration system having a first vessel 20 having a turret (fig 16) around which the vessel can weathervane, the turret being moored 30 to the sea bed, and a second vessel connected with at least one riser to a subsea well wherein power is transferred from the power generator (col. 4, lines 1-15) via an electrical swivel on the first vessel, to a power supply cable, the power supply cable extending along the fluid transfer duct (fig 16) from the first vessel (20) to the second vessel (fig 10), and being supported at least

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partly by the fluid transfer duct (fig 10 & 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Pollack, as taught by Salusbury-Hughes, to include a power generator being situated on the first vessel (160) and power supply cable for the expected benefit of enabling power generation and electrical power supply to be transported between vessels to operate various production equipment, thereby minimizing power generation equipment storage space on the second vessels.

As concerns claim 3 and 7, the combination does not specify at least three transverse mooring arms, radially extending from the central part and the end part of the fluid transfer duct being attached to a vertical arm; however, the Examiner takes official notice that this type of TLP is notoriously well known in the art.

12. Claims 4-6, 12, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack 5,542,783 and Salusbury-Hughes 4,753,185, as applied to claims above, further in view of Wittgentstein 3,173,271. As concerns these claims, the combination does not show an anchor line extending from the sea bed to the second end section of the horizontal mid section, at an angle to the vertical. However, Wittgentstein shows a similar transfer duct (1) with an anchor line (5) extending from the sea bed to the second end section of the horizontal mid section, at an angle (fig 4) to the vertical and buoyancy elements ( $p_o$ ) are placed locally along the horizontal mid section of the transfer duct (1), the horizontal section extending along a curved trajectory the buoyancy member ( $p_o$ ) is attached to the first end section of the fluid transfer duct (1), a second anchor line (5) being attached to the seabed and the first end



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section at an angle with the vertical and wherein the buoyancy elements ( $p_o$ ) are placed locally along the horizontal mid section of the transfer duct (1), the horizontal section extending along a curved trajectory

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by Wittgentstein, to include buoyancy elements and angled anchor lines to maintain the position of the transfer duct in harsh marine environments to prevent wear and damage to the duct from stress, movement and/or subsea currents.

13. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack 5,542,783 and Salusbury-Hughes 4,753,185, as applied to claims above, further in view of Pollack 6,394,154. As concerns claims 10 and 16, the combination does not show a tensioning cable extending at an angle to the vertical, or a clump weight is attached to at least one of the end sections of the fluid transfer duct,.

However, Pollack shows a similar transfer duct having a tensioning cable extending at an angle to the vertical, or a clump weight is attached to at least one of the end sections of the fluid transfer duct exerting a downward force component on the end section, the end section being supported by a buoyancy element or by a support cable attached to the first and/or second vessel extending at an angle to the vertical. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by Pollack, to include clump weights to maintain the position of the transfer duct in harsh marine environments to prevent wear and damage to the duct from stress, movement and/or subsea currents.

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14. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pollack 5,542,783 and Salusbury-Hughes 4,753,185 and Pollack 6,394,154, as applied to claim 10 above, further in view of Wittgentstein 3,173,271. As concerns claim 20, the combination does not show wherein buoyancy elements; however, Wittgentstein shows transfer duct (1) having buoyancy elements ( $p_o$ ) are placed locally along the horizontal mid section of the transfer duct (1), the horizontal section extending along a curved trajectory.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by Wittgentstein, to include buoyancy elements and angled anchor lines to maintain the position of the transfer duct in harsh marine environments to prevent wear and damage to the duct from stress, movement and/or subsea currents.

### ***Response to Arguments***

15. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

/Thomas A Beach/  
Primary Examiner, Art Unit 3671

June 8, 2010

**THOMAS A. BEACH**  
**Primary Examiner**  
**Group 3600**